

***Hendecaneura axiotima* (Meyrick) (Lepidoptera, Tortricidae) and its allied new species from the Himalayan range**

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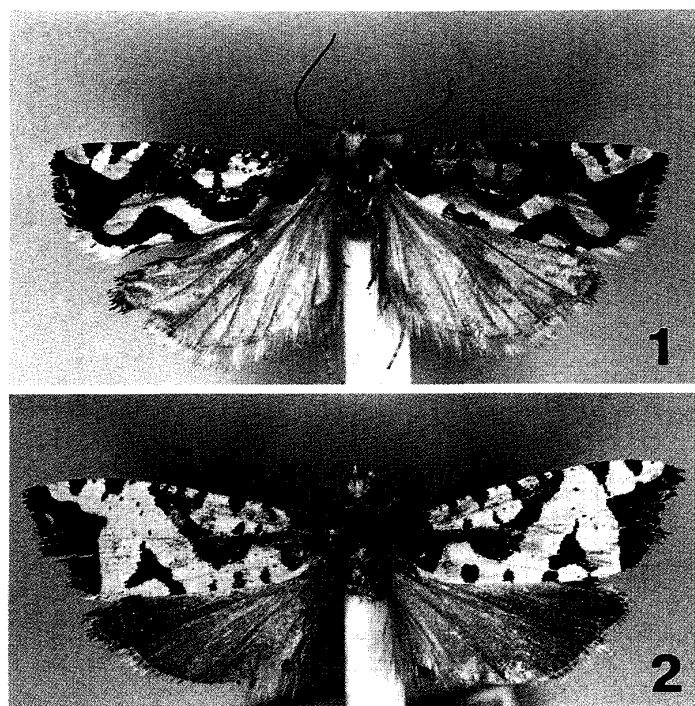
**Abstract** *Hendecaneura himalayana* Nasu, n. sp., a close ally of *H. axiotima* (Meyrick), is described from Nepal and India (Sikkim). *H. axiotima* is newly recorded from Nepal and India (Sikkim). The adults and the genitalia of both species are illustrated.

**Key words** *Hendecaneura himalayana* Nasu, n. sp., *Hendecaneura axiotima* (Meyrick), the Himalayan range, genitalia, Tortricidae.

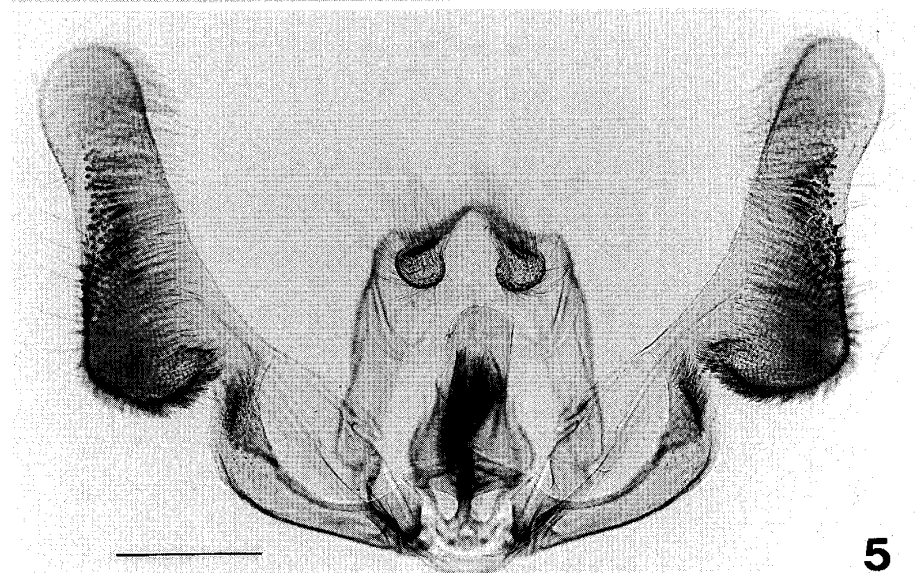
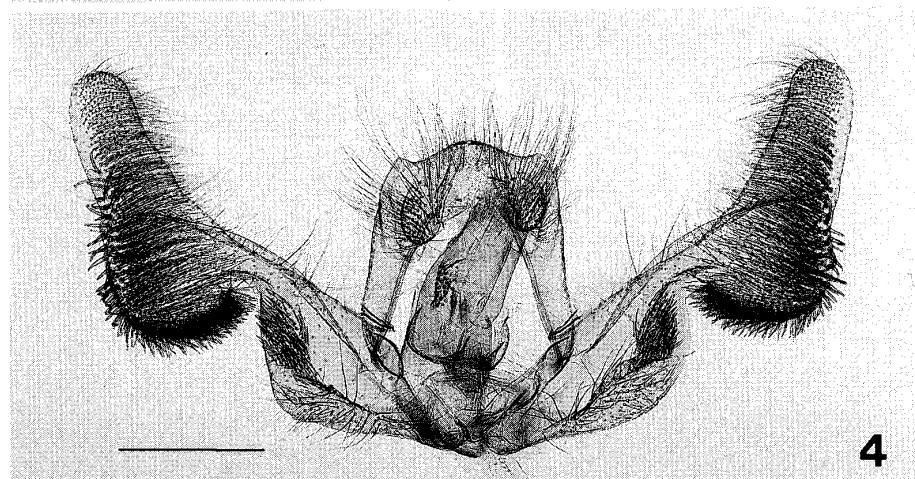
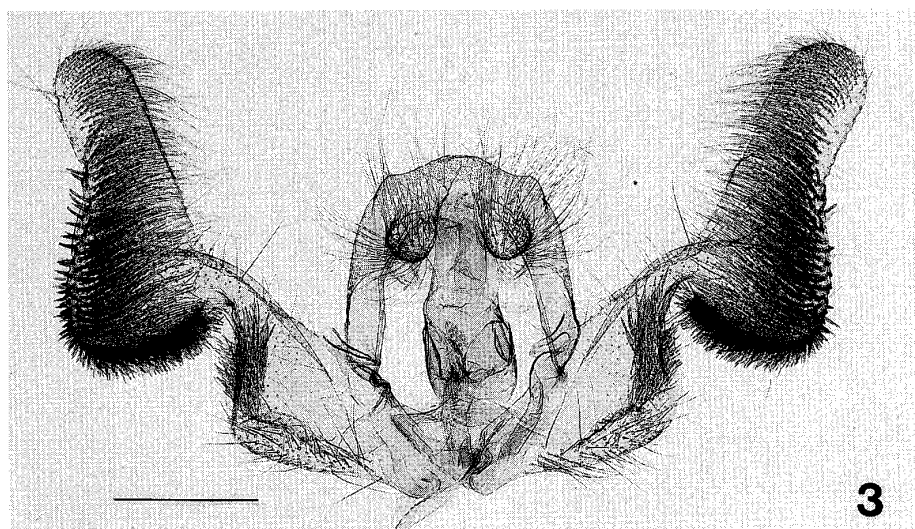
I examined a short series of tortricids identified as *Hendecaneura axiotima* (Meyrick) from Nepal and India (Sikkim) at the Natural History Museum, London, UK (BMNH), and concluded that it consists of two species, *H. axiotima* and a new species. In the following lines the description of the new species and distinguishing characters between them are given, with illustrations of adults and genitalia. All materials are deposited in BMNH.

***Hendecaneura himalayana* Nasu, n. sp. (Figs 1, 3, 6)**

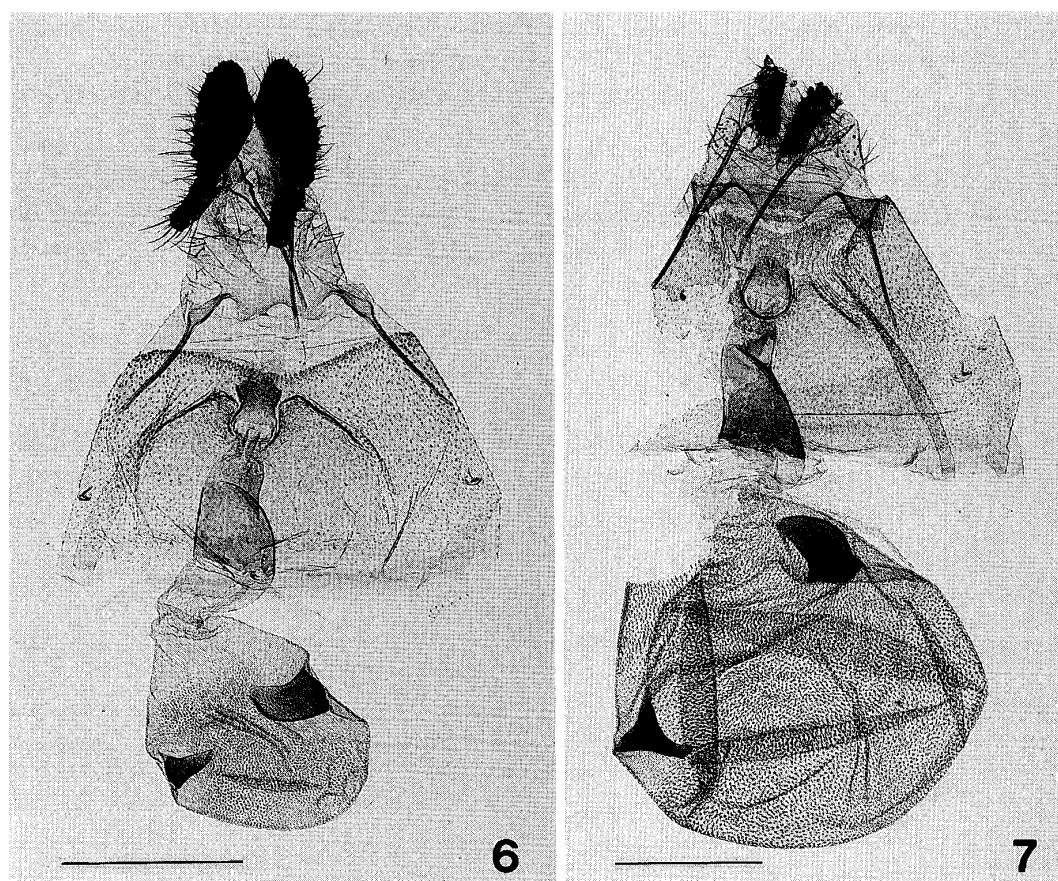
Male (Fig. 1). Wing expanse 25-26 mm. Head cream-white. Antenna grayish brown, scape cream-white. Labial palpus blackish brown, inner surface whitish. Thorax blackish brown; tegula blackish brown, posterior half cream-white. Forewing with 12 veins, all veins separated; ground color blackish brown. Costa with six pairs of whitish



Figs 1, 2. Adults of *Hendecaneura* spp. 1. *H. himalayana* n. sp., holotype, ♂. 2. *H. axiotima* (Meyrick), lectotype, ♂.



Figs 3-5. Male genitalia of *Hendecaneura* spp. 3. *H. himalayana* n. sp., holotype, slide BMNH 27576. 4. *H. axiotima* (Meyrick), slide BMNH 27574. 5. *Ditto*, lectotype, slide BMNH 7121. Scales: 0.5 mm.



Figs 6, 7. Female genitalia of *Hendecaneura* spp. 6. *H. himalayana* n. sp., paratype, slide BMNH 27577. 7. *H. axiotima* (Meyrick), slide BMNH 27575. Scales: 1 mm.

strigulae from apex to basal  $1/4$ ; the first two pairs large, confluent apically, forming a triangular cream-white patch; second and third pairs obscure, emitting outward-oblique sinuate gray streaks to middle; the last two pairs emitting cream-white streaks, confluent, forming an irregular cream-white patch (median fascia). Dorsum with a wide sinuate cream-white streak running from near base to near tornus and an irregular cream-white patch before tornus. Termen with three cream-white spots medially. Cilia blackish brown, cream-white on tornus. Hindwing light grayish brown, with cubital pecten; cilia concolorous with wing.

Male genitalia (Fig. 3). Tegumen with a pair of small mound-like lobes dorsolaterally. Uncus mound-like. Socius short, oblong lobe, setose. Gnathos weakly sclerotized. Aedeagus short, cone-shaped; vesica with 33 cornuti. Valva constricted deeply (neck distinct, narrow); basal opening large, with many thick setae on the posterior edge; sacculus with mound-like lobe; cucullus triangular.

Male scent organs. Costal fold rudimentary, costa a little curved over from base to  $1/4$  of costa. Forewing on the upper side with a small circular pocket near the junction of 1A and 2A veins. The pocket covered with broad scales on the rim. Hindwing with a tuft of hair-like cream-white scales at the base of the cell on the upper side.

Female. Wing expanse 28 mm. Similar to male.

Female genitalia (Fig. 6). Papilla analis large, flat. Apophysis posterioris as long as apophysis anterioris. Tergite 8 concaved in the anterior edge. Sternite 7 broadly sclerotized, semicircular. Ostium bursae located in a deep incision on the posterior edge

of sternite 7. Lamella postvaginalis sclerotized, prolonged, spinulose on the surface, without setae, fused with the incision. Ductus bursae sclerotized medially. Corpus bursae small, oval, spinulose on the inner surface, with two large wide blade-like signa different in size.

Material examined. Holotype. NEPAL: Chautara Dist., Choche Lekh (3,500 m), ♂, 14. VIII. 1983 (Allen leg.), slide BMNH 27576. Paratypes. Same locality and date as holotype, 1 ♂ (Allen leg.). INDIA: Sikkim, Tonglo (3,000 m), 1 ♀, VII. 1886 (Elwes leg.), slide BMNH 27577.

Host-plant. Unknown.

Distribution. Nepal, India (Sikkim).

Remarks. This species is closely related to *H. axiotima*, and has the wing pattern and the male genitalia very similar to those of it. Distinguishing characters between them are described below.

	<i>himalayana</i> n. sp.	<i>axiotima</i>
Head		
Male frons	without erected scales	with erected scales curved ventrally in tips
Forewing		
Dorsum	with wide sinuate cream-white streak, which does not touch costal triangular cream-white patch apically	with wide sinuate cream-white streak, which touches costal triangular cream-white patch apically
Male genitalia		
Tegumen	with a pair of small mound-like lobes dorsolaterally	with a pair of large ear-like lobes dorsolaterally
Female genitalia		
Tergite 8	concaved in anterior edge	rounded in anterior edge
Apophysis anterioris	a little expanded in base	expanded in base, forming a triangular plate
Corpus bursae	small, oval	large, globular
Signa	different in size	equal in size

### *Hendecaneura axiotima* (Meyrick) (Figs 2, 4, 5, 7)

*Eucosma axiotima* Meyrick, 1937, in Caradja & Meyrick, *Dt. ent. Z. Iris* **51**: 178; Clarke, 1958: 348, figs 2, 2a (wing, ♂ genitalia).

*Eucosmodes axiotima*: Kuznetsov, 1973: 690, figs 11, 12 (♂ ♀ genitalia).

*Hendecaneura axiotima*: Razowski, 1989a: 289; Kawabe *et al.*, 1992: 107.

Material examined. Lectotype. CHINA: Yunnan, Likiang, ♂, H. 8. 34. [VIII. 1934], slide BMNH 7121. Other materials. NEPAL: Bagmati, Phulchouki (2,000–2,500 m), 1 ♂, 3. VII. 1984 (Allen leg.); Nauling Lekh, 1 ♂, 10. VII. 1984 (Allen leg.), slide BMNH 27574. INDIA: Sikkim, Tonglo (3,000 m), 2 ♂, VII. 1886 (Elwes leg.); 1 ♀, 8. VII. 1888 (Möller leg.), slide BMNH 27575.

Host-plant. Unknown.

Distribution. China (Yunnan), Taiwan, Nepal, India (Sikkim) (first record from the latter two regions).

Remarks. This species is closely allied to *H. himalayana* n. sp. Distinguishing characters between them are noted in the remarks for *himalayana* n. sp.

Kuznetsov (1973) gave the illustrations of the male and female genitalia of *axiotima* based on two specimens from China (Yunnan), and Razowski (1989*b*) also cited his illustration of female genitalia under *axiotima*. Of Kuznetsov's illustrations the male one is similar to the genitalia of *axiotima*, but the female one to the genitalia of *himalayana* n. sp. rather than those of *axiotima* in having the tergite 8 with concave anterior edge, the smaller corpus bursae and the signa different in size. It is quite possible that the female specimen examined by Kuznetsov is not *axiotima* but *himalayana* n. sp. *H. axiotima* was recorded from Taiwan by Kawabe *et al.* (1992) in the checklist of the Lepidoptera of Taiwan, but the data of voucher specimen(s) have not been described.

## Acknowledgments

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## 摘 要

*Hendecaneura axiotima* (Meyrick) とヒマラヤ産の近縁な 1 新種 (鱗翅目, ハマキガ科)  
(那須義次)

ロンドンの自然史博物館に所蔵されているヒマラヤ産の *Hendecaneura axiotima* (Meyrick) とされている標本を調査したところ, *axiotima* とそれに近縁な 1 新種を認めた. 本論文において, この新種を記載するとともに, 両種の成虫・雌雄交尾器を図示し, さらに両種の区別点をまとめた.

*Hendecaneura himalayana* Nasu, n. sp.

開張: 雄 25-26 mm, 雌 28 mm. 前翅の地色は黒褐色. 前翅の内縁は幅広い波状のクリーム白色線を持ち, この線は前縁の翅頂にある三角形のクリーム白色紋とはつながらない.

分布: ネパール, インド (シッキム).

本種は *axiotima* と近縁であり, 外部標徴も類似するが, 1) 雄の前額に隆起した鱗片を持たないこと, 2) 前翅の内縁は幅広い波状線を持ち, この線は翅頂の三角紋とはつながらないこと, 3) 雄交尾器の tegumen は背側方に 1 対の小さな隆起状の lobes を持つこと, 4) 雌交尾器の第 8 節背板の前縁がくぼんでいること, 5) apophysis anterioris の基部は少ししか広がらないこと, 6) corpus bursae が小さく, 卵形であること, 7) signa の大きさが異なることから区別できる.

*Hendecaneura axiotima* (Meyrick)

分布: 中国 (雲南省), 台湾, ネパール, インド (シッキム) (後者の 2 地域からは新記録).

Kuznetzov (1973) は中国 (雲南省) 産の 2 個体に基づいて、本種の雌雄交尾器を図示したが、それらの図のうち、雌交尾器の図は *himalayana* n. sp. のものと酷似している。彼が検討した雌標本は *himalayana* n. sp. である可能性が高い。

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